Docket No.: 926530-96585 FORM PTO-1595 (Modified) U.S. DEPARTMENT OF COMMERCE RECC⁻ 09-04-2003 (Rev. 03-01) Patent and Trademark Office OMB No. 0651-0027 (exp.5/31/2002) P08/REV03 Tab settings → To the Director of the Chited States Patent and 102540683 I original documents or copy thereof. 1. Name of conveying party(ies)40544 2. Name and address of receiving party(ies): Xin Zhang Seiji Kado Name: Hitachi Cable Ltd. Hiroaki Satou Internal Address: 6-1, Otemachi 1-chome, Chiyoda-ku Additional names(s) of conveying party(ies) ☐ Yes ☒ No Tokyo, Japan 3. Nature of conveyance: Assignment ■ Merger Street Address: Security Agreement ☐ Change of Name City: _____ State: ___ ZIP: _ □ Other Execution Date: July 4, 2003 Additional name(s) & address(es) attached?
Yes
No 4. Application number(s) or patent numbers(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) B. Patent No.(s) 10/446,001 09/03/2003 GTON11 00000057 10446001 01 FC:8021 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: concerning document should be mailed: Name: Robert F. I. Conte 7. Total fee (37 CFR 3.41):....\$ 40.00 Internal Address: Barnes & Thornburg ☒ Enclosed - Any excess or insufficiency should be credited or debited to deposit account 1 North Wacker Drive ☐ Authorized to be charged to deposit account **Suite 4400** 8. Deposit account number: Street Address: State: IL ZIP: 60606 City: Chicago (Attach duplicate copy of this page if paying by deposit account) DO NOT USE THIS SPACE 9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. ROBERT F. I. CONTE Date Name of Person Signing Signature

Total number of pages including cover sheet, attachments, and document:

Docket No. 926530 - 96585

ASSIGNMENT

Joint Inventorship

WHEREAS, Xin ZHANG, Seiji KADO, and Hiroaki SATOU, hereinafter called the "Assignors",
have invented a new and useful "PLANAR ANTENNA AND ARRAY ANTENNA"
, for a full description of which reference is here made to an
application for Letters Patent of the United States executed by them on even date herewith; and
WHEREAS, Hitachi Cable, Ltd., a corporation/company organized and existing
under the laws of <u>Japan</u> having a principal office and place of business at <u>6-1, Otemachi 1-chome</u> ,
Chiyoda-ku, Tokyo, Japan hereinafter called the
"Assignee", is desirous of acquiring the entire right, title and interest in and to said invention, the application above
identified, and in, to and under Letters Patent which may be obtained for said invention, as hereinafter more fully set
forth;
NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, be it known that for and in consideration of
the sum of, and other valuable and legally sufficient considerations, the receipt of which by the said
Assignors from the said Assignee is hereby acknowledged, the said Assignors have sold, assigned and transferred,
and by these presents do sell, assign and transfer unto the said Assignee, the entire right, title and interest for the
United States in and to the invention and application hereinabove identified, and any Letters Patent of the United
States that may issue for said invention as well as all continuations, continuations-in-part, divisions and reissues
thereof, and any Letters Patents therefor in all countries foreign to the United States; to have and to hold for the sole
and exclusive use and benefit of the said Assignee, its successors and assigns to the full end of the term for which
any and all of said Letters Patent for said invention that may issue.

And the said Assignors do hereby covenant and agree, for themselves and their legal representatives, that they will assist their said Assignee in the prosecution of the application herein identified; in the making and prosecution of any other applications for Letters Patent that the said Assignee may elect to make covering the invention herein identified, as hereinbefore set forth, including any application for reissue, application for

PATENT REEL: 014442 FRAME: 0938 reexamination, or any proceeding in the United States Patent and Trademark Office affecting said invention, investing in the said Assignee like exclusive title in and to all such other applications and Letters Patent; and in the prosecution of any interference or reexamination which may arise involving said invention, or any application or Letters Patent herein contemplated; and that they will execute and deliver to the said Assignee any and all additional papers which may be requested by the said Assignee to fully carry out the terms of this assignment.

And the Commissioner of Patents and Trademarks is hereby authorized and requested to issue Letters

Patent to the said Assignee in accordance with the terms of this assignment.

IN TESTIMONY WHEREOF, the said Assignors have hereunto set their hands on the date indicated

below.	
Dated: July 4, 2003	son shang
	(Name of First Inventor) Xin ZHANG
	Address c/o Hitachi Cable, Ltd.,
	6-1, Otemachi 1-chome, Chiyoda-ku, Tokyo, Japan
Dated: July 4, 2003	Seiji kado (Name of Second Inventor) Seiji KADO
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WITNESS /	WITNESS
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RECORDED: 08/21/2003

REEL: 014442 FRAME: 0939